Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An insulated gate field effect transistor, comprising:

a source region of a first conductivity type;

a body region of a second conductivity type opposite to the first conductivity type adjacent to the source region;

a drift region of exclusively the first conductivity type adjacent to the body region;

a drain region of the first conductivity type adjacent to the drift region, so that body and drift regions are arranged between the source and drain regions, the drain region being of higher doping density than the drift region, and wherein the region between the body region and the drain region is made up of exclusively the drift region of exclusively the first conductivity type; and

insulated trenches extending from the source region through the body region and into the drift region, each trench having sidewalls, and including an insulator on the sidewalls, and a conductive gate electrode between the insulating sidewall,

wherein the base of each trench is filled with an insulator plug adjacent to substantially all of the length of the drift region between the body region and drain region, and the respective gate electrode is provided in the trench over the plug adjacent to the source and body regions.

2. (canceled)

3. (previously presented) An insulated gate field effect transistor according to claim 1 wherein the doping concentration in the body region is in the range of about $0.5x10^{17}$

cm^{-3} to about $3x10^{17}$ cm^{-3}, and the doping concentration in the drift region is in the range of about $1x10^{15}$ cm^{-3} to about $2x10^{17}$ cm^{-3}.

4. (previously presented) An insulated gate field effect transistor according to claim 1 wherein the plug is of dielectric filler filling the trench between the insulator on the sidewalls adjacent to the drain region.

5. (previously presented) An insulated gate field effect transistor according to claim 1 having a semiconductor body having opposed first second major surfaces,

wherein the source region is at the first major surface over the region, the body region is over the drift region and the drift region is over the drain region, and

the trench extends from the first major surface towards the second major surface through the source, body and drift regions.

6. (previously presented) An insulated gate field effect transistor according to claim 5 having a plurality of cells, each cell having a source region at centre of the cell surrounded by the insulated trench.

7. (previously presented) An insulated gate field effect transistor according to claim 6 wherein the cells have a hexagonal geometry.

8. (previously presented) An insulated gate field effect transistor according to claim 6 wherein the trench has gate oxide on the sidewalls, and the trench adjacent to the drift region is filled with filler oxide between the gate oxide on the sidewalls on either side of the trench.

9. (previously presented) An insulated gate field effect transistor according to claim 5 having a plurality of cells, arranged as stripes across the first major surface with alternating trenches and source regions.

10. (previously presented) An insulated gate field effect transistor according to claim 6 wherein the cell pitch is in the range of about 0.2 microns to about 0.7 microns.

11. (previously presented) An insulated gate field effect transistor according to claim 1 wherein the doping concentration in the drift region is non-uniform.

12. (currently amended) An insulated gate field effect transistor according to claim 11 wherein the non-uniform doping concentration in the drift region is comprises a higher doping concentration adjacent to the drain region and a lower doping concentration adjacent to the ~~base~~ body region.

13. (currently amended) An insulated gate field effect transistor according to claim 12 wherein the non-uniform doping concentration in the drift region is linearly graded from the higher doping concentration adjacent to the drain region to the lower doping concentration adjacent to the ~~base~~ body region.

14. (previously presented) An insulated gate field effect transistor according to claim 11 wherein the doping concentration in the body region is in the range of about $0.5x10^{17}$ cm^{-3} to about $3x10^{17}$ cm^{-3}, and the doping concentration in the drift region is in the range of about $1x10^{15}$ cm^{-3} to about $2x10^{17}$ cm^{-3}.